

10/12/01  
J1131 U.S. PTO

10-15-01

33924US

A

J1017 U.S. PTO  
09/976195  
10/12/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Gyanesh P. Khare

For: DESULFURIZATION AND NOVEL SORBENT FOR SAME

LETTER

Assistant Commissioner for Patents  
Washington, D. C. 20231

Attached hereto for filing in the United States Patent and Trademark Office is the patent application identified above. This application includes 0 sheet(s) of drawings.

The filing fee has been computed as follows:

Basic Fee	\$740.00
Additional Fees:	
Total number of claims (whether independent or dependent) over 20, times \$18.00	\$576.00
Number of independent claims over 3, times \$84.00	\$000.00
Multiple Dependent Claims (\$280)	\$000.00
Total Filing Fee	\$1316.00

Please charge Deposit Account 16-1575 in the amount of the total filing fee stated above. The Commissioner is hereby authorized to charge any additional fees which may be required under 37 C.F.R. 1.16 or 37 C.F.R. 1.17, or credit any overpayment, to Deposit Account 16-1575, but is not authorized to charge any fee provided for under 37 C.F.R. 1.18.

If the Examiner wishes to contact representatives of record concerning the accompanying application prior to the first Official Action, such contact should be made with the undersigned.

The following items, a copy of each is attached, are called to the Examiner's attention:

U.S. 5,935,420 (Baird, Jr. et al., August 10, 1999) - Discloses a desulfurization process using a catalyst system of a noble metal on an inorganic refractory material and a hydrogen sulfide sorbent. The patent does not disclose or suggest a single sorbent useful to reduce the sulfur content of a hydrocarbon stream, nor does the patent disclose or suggest a single catalyst, as taught in the instant invention: this patent teaches a physical mixture of two different catalysts.

U.S. 4,654,317 (Sachtler et al., March 31, 1987) - Discloses a catalyst having a Group VIII metal dispersed on a porous crystalline alumino-silicate wherein a second metal, other than zinc, is dispersed in ionic form. The patent does not disclose or suggest use of the catalyst in any particular process. The patent does not disclose or suggest use of zinc as a catalyst component.

U.S. 5,439,583 (Robinson et al., Aug. 8, 1995) - Discloses a method to remove sulfur from naphtha using a mixture of  $\text{Pt}/\text{Al}_2\text{O}_3$  and  $\text{ZnO}/\text{Al}_2\text{O}_3$ . The patent does not disclose or suggest to combine platinum and zinc in the same catalytic particle or to reduce platinum for a catalyst. The patent teaches two different catalysts, not a single catalyst as taught in the present invention.

U.S. 5,792,438 (Scranton, Aug. 11, 1998) - Discloses a process using zinc oxide on montmorillonite with a platinum oxide activator to remove sulfur compounds from fluids. Reduction of the sorbent combination prior to use for sulfur removal is not disclosed or suggested. The patent discloses iron oxide with a copper oxide activator and not a noble metal, as taught in the present invention.

The following items are also called to the Examiner's attention:

09976195-101201  
FOI 92-101201

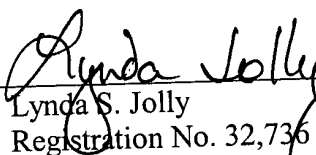
U.S. 5,914,292 (Khare et al., June 22, 1999) - This patent teaches away from the use of platinum, as in the present invention, by reciting a preference for a Group VIII metal.

U.S. 5,776,331 (Khare et al., July 7, 1998) - This patent teaches away from the use of platinum by exemplifying cobalt oxide and nickel oxide.

Respectfully submitted,

RICHMOND, HITCHCOCK,  
FISH & DOLLAR

By

  
Lynda S. Jolly  
Registration No. 32,736

RICHMOND, HITCHCOCK,  
FISH & DOLLAR  
P.O. Box 2443  
Bartlesville, OK 74005  
1-918-661-0611

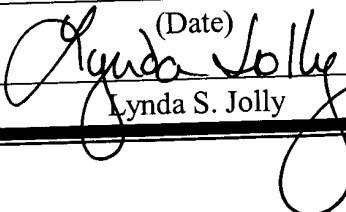
"Express Mail" Mailing Label Number: EK849792806US

Date Of Deposit: October 12, 2001

I hereby certify that this fee letter is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on

OCT 12 2001

(Date)

  
Lynda S. Jolly

09976195-101201  
FOOT-56792660

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Gyanesh P. Khare

For: DESULFURIZATION AND NOVEL SORBENT FOR SAME

"Express Mail" Mailing Label Number: EK849792806US

Date of Deposit: October 12, 2001

**CERTIFICATE OF MAILING BY "EXPRESS MAIL"**

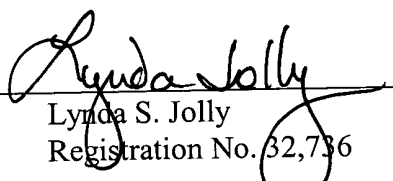
Assistant Commissioner for Patents  
Washington, D. C. 20231

Sir:

I hereby certify that this application is being deposited with the United States Postal Service "Express Mail Post Office To Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Respectfully submitted,

RICHMOND, HITCHCOCK,  
FISH & DOLLAR

By   
Lynda S. Jolly  
Registration No. 32,736

RICHMOND, HITCHCOCK,  
FISH & DOLLAR  
P.O. Box 2443  
Bartlesville, Oklahoma 74005  
1-918-661-0611

09976195-101201  
T02T0T 56T9Z660